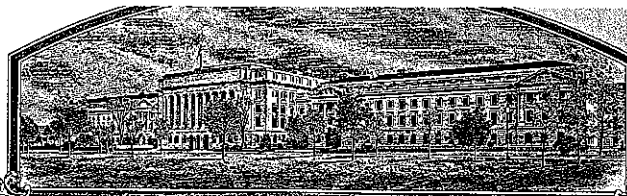


No.

200300165



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

South Dakota Agricultural Experiment Station

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

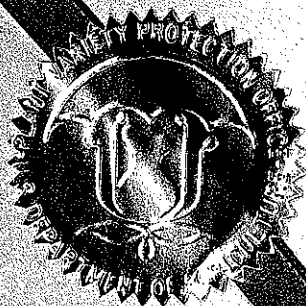
NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED, AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (34 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'SD1081RR'

Reissuance, original grant, May 23, 2003

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-fifth day of September, in the year two thousand and three.



Attest.

Mark Hermel
Acting Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Gregory
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER South Dakota Agricultural Experiment Station		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME Hendricks RR	3. VARIETY NAME SD1081RR
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) South Dakota State University Agricultural Hall 129 Brookings, SD 57007 USA		5. TELEPHONE (Include area code) (605)-688-4149	FOR OFFICIAL USE ONLY PVPO NUMBER 200300165
		6. FAX (include area code) (605) 688-6065	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) SD Agricultural Experiment Station	8. IF INCORPORATED, GIVE STATE OF INCORPORATION	9. DATE OF INCORPORATION	FILING DATE 2/24/2003
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Dr. Roy A. Scott NPB 247, Box 2140C Plant Science Department South Dakota State University Brookings, SD 57007			FILING AND EXAMINATION FEES: \$ 3,652.00 DATE 2/24/2003 CERTIFICATION FEE: \$ 432.00 DATE 4/28/03
11. TELEPHONE (Include area code) (605) 688-4749	12. FAX (include area code) (605) 688-4452	13. E-MAIL roy_scott@sdstate.edu	14. CROP KIND (Common Name) Soybean
15. GENUS AND SPECIES NAME OF CROP Glycine max.	16. FAMILY NAME (Botanical) Leguminosae	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
18. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,750), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		19. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? See Section 83(a) of the Plant Variety Protection Act <input checked="" type="checkbox"/> YES (If "yes", answer items 20 and 21 below) <input type="checkbox"/> NO (If "no", go to item 22) 20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED 21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? IF YES, SPECIFY THE <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED NUMBER 1,2,3, etc. (If additional explanation is necessary, please use the space indicated on the reverse.)	
22. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		23. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	
24. The owners declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			

SIGNATURE OF OWNER

SIGNATURE OF OWNER

NAME (Please print or type)

NAME (Please print or type)

Kevin D. Kephart

CAPACITY OR TITLE

DATE

CAPACITY OR TITLE

DATE

Director, SD Ag. Experiment Station

2-14-2003

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (*in the sense that it will reproduce an entire plant*) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$2,705 (\$320 filing fee and \$2,385 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 500, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$320 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvp.htm>

ITEM

- 18a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 18b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 18c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 18d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 18e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
19. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
22. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
23. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

21. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

22. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

USA - March 1, 2002 Foundation seed was offered for sale to growers for the purpose of further increase.

23. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

US Patent; Issued May 6, 1997, Application # 476008; Patent Reference # 5,627,061

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. Telephone: (301) 504-8089. <http://www.ams.usda.gov/lsg/seed/lsg-sd.htm>

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 328-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

S&T-470 (04-01) designed by the Plant Variety Protection Office with WordPerfect 6.0a. Replaces STD-470 (02-99) which is obsolete.

Exhibit A**Origin and Breeding History of SD1081RR Soybean**

In 1996 Monsanto Company licensed to SDSU, rights to use Monsanto's Roundup Ready gene to develop soybean cultivars tolerant to Roundup herbicide. Seeds supplied to SDSU under this licensing agreement consisted of 50 BC1F2 seeds derived by Monsanto from crossing soybean variety 'Resnick' with soybean genotype '40-3-2', which Monsanto had transformed with a gene which imparts Roundup herbicide tolerance. Monsanto subsequently backcrossed the gene from their transformed line 40-3-2 into soybean cultivars of various maturity groups for distribution at different geographic latitudes in the US. The 'Resnick' backcross was the variety most adapted to the northern latitudes where SD is located. The pedigree of the material used to develop SD1081RR was as follows: ['Resnick' (2) x 40-3-2].

During summer 1996 the BC1F2 seeds provided by Monsanto were grown to produce BC1F3 plants, which were sprayed with Roundup. Sixteen plants that did not contain the Roundup Ready gene were killed. Remaining resistant plants were used as the male parents to cross with the cultivar 'Hendricks', which is a cultivar not tolerant to Roundup. Three backcrosses were made to 'Hendricks' in the field and growth chamber during winter 1996-summer 1997. Plants grown after each backcross were sprayed with Roundup to identify the resistant plants to be used in the next backcross. The pedigree of SD1081RR, therefore, is as follows: ['Hendricks' (4) x ('Resnick' (2) x 40-3-2)]. During winter 1997, BC3F2 seeds were produced in the winter nursery. Also during winter 1997, BC3F3 plants were grown in the winter nursery, and seed harvested from individual plants (BC3F4 seed). During Summer 1998, 150 BC3F4 plant rows were grown in the field and sprayed with Roundup to identify heterozygous rows. Of the 150 rows, 56 were segregating for undesirable traits, and were discarded.

Of the 94 remaining rows, 74 were gray and 20 were tawny pubescence. Tawny rows were discarded. Of the 74 gray-pubescence rows, 50 were homozygous for tolerance to Roundup, and BC3F5 seeds were harvested from each row in bulk. These were further reduced to 20 lines based on seed characteristics. In winter 1998, these 20 BC3F5 lines were further increased in the winter nursery. Yield and agronomic evaluations were conducted in 1999 (BC3F6), 2000 (BC3F7), and 2001 (BC3F8). In 1999, 50 plants from each line were harvested to initiate breeder seed production. These were grown in rows in 2000. Concurrently, in 1999, a sample of seed from each plant was used to screen for the presence of specific *Phytophthora* root rot genes in the laboratory. All 20 lines contained the *Rps1-a* gene for resistance to *Phytophthora* root rot. Based on 1999 yield and agronomic data, the best line was identified. Breeder seed produced in 1999 by compositing seed from rows that were resistant to *Phytophthora* root rot, was used to produce Foundation Seed in 2000, which was further increased in 2001.

In March 2002, seed of SD1081RR was released to growers. No off-type variants were noted in SD1081RR during the seed multiplication process from 1999-2001. SD1081RR has been reproduced for 3 generations since purification without changes in any of its distinguishing characteristics. The variety, therefore, was deemed uniform and stable. The variety breeds true and meets all certification standards.

Exhibit B**Statement of Distinctness of SD1081RR Soybean**

SD1081RR is most similar to SD1091RR soybean in some characteristics, and most similar to Hendricks in others. Hendricks is the most similar variety to SD1081RR. Since SD1081RR was developed from three backcrosses with Hendricks as the recurrent parent, as indicated in the breeding history, the major distinction between the two varieties is the presence of the Roundup Ready gene in SD1081RR, and its absence in Hendricks. SD1081RR and Hendricks can easily be distinguished by their differences in reaction to Glyphosate herbicide. SD1081RR is 100% tolerant to the herbicide Glyphosate. Hendricks, however, is 100% susceptible to Glyphosate. When sprayed with 64 ounces per acre of Glyphosate at the three-leaf stage, 100% of Hendricks plants were killed, while no plants of SD1081RR were killed. The hila color is the major distinction between SD1081RR and SD1091RR. Whereas SD1081RR has spherical flattened seeds with yellow hila, SD1091RR has elongate flattened seeds with imperfect black hila.

Replicated Field Trials Comparing Roundup Tolerance of SD1081RR and Hendricks Soybean

Variety	Location 1		Location 2		Location 3	
	Number of		Number of		Number of	
	Plants		Plants		Plants	
	Dead	Alive	Dead	Alive	Dead	Alive
SD1081RR	0	100	0	100	0	100
Hendricks	100	0	100	0	100	0

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is (0581-0055). The time required to complete this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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**U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705**

**EXHIBIT C
(Soybean)**

**OBJECTIVE DESCRIPTION OF VARIETY
SOYBEAN (*Glycine max* (L.) Merr.)**

NAME OF APPLICANT(S) South Dakota Agricultural Experiment Station	FOR OFFICIAL USE ONLY
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) South Dakota State University Agricultural Hall 129 Brookings, SD 57007 USA	PVP NUMBER 200300165
	VARIETY NAME SD1081RR
	TEMPORARY OR EXPERIMENTAL DESIGNATION Hendricks RR

PLEASE READ ALL INSTRUCTIONS CAREFULLY: Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in the first box (e.g.

9	9	9
---	---	---

 or

0	9
---	---

) when number is either 99 or less or 9 or less respectively. Data for quantitative

plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal

Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used:

Please answer all questions for your variety; lack of response may delay progress of your application.

A. MORPHOLOGY

Seed Shape:

<table border="1" style="display: inline-table;"><tr><td>2</td></tr></table>	2	1 = Spherical (L/W, L/T, and T/W ratios < 1.2)	2 = Spherical-Flattened (L/W ratio > 1.2; L/T ratio < 1.2)
2			
	3 = Elongate (L/T ratio > 1.2; T/W ratio < 1.2)	4 = Elongate-Flattened (L/T ratio > 1.2; T/W ratio > 1.2)	

Seed Coat Color:

<table border="1" style="display: inline-table;"><tr><td>1</td></tr></table>	1	1 = Yellow	2 = Green	3 = Brown	4 = Black	5 = Other (Please Specify)
1						

Seed Coat Luster:

<table border="1" style="display: inline-table;"><tr><td>1</td></tr></table>	1	1 = Dull	2 = Shiny
1			

Seed Size:

<table border="1" style="display: inline-table;"><tr><td>1</td><td>8</td></tr></table>	1	8	grams/100 seeds
1	8		

Hilum Color:

<table border="1" style="display: inline-table;"><tr><td>2</td></tr></table>	2	1 = Buff	2 = Yellow	3 = Brown	4 = Gray	5 = Imperfect Black
2						
	6 = Black	7 = Other (Please Specify)				

A. MORPHOLOGY (Continued)

2003 00165

Cotyledon Color:

1 = Yellow 2 = Green

Seed Protein Peroxidase Activity:

1 = Low 2 = High

Hypocotyl Color:

1 = Green 2 = Green with Bronze 3 = Light Purple 4 = Dark Purple extending to
('Evans' or 'Davis') Bands below Cotyledon below Cotyledons unifoliolate leaves ('Hodgson',
('Woodworth' or 'Tracy') ('Beeson' or 'Pickett 71') 'Coker', or 'Hampton 266A')

Leaf Shape:

1 = Lanceolate 2 = Oval 3 = Ovate 4 = Other (Please Specify)

Flower Color:

1 = White 2 = Purple 3 = White with a Purple Throat

Pod Color:

1 = Tan 2 = Brown 3 = Black

Pubescence Color:

1 = Gray 2 = Brown (Tawny) 3 = Light Tawny

Plant Habit:

1 = Determinate 2 = Semi - Determinate 3 = Indeterminate 4 = Intermediate

Maturity Group:

<input type="text" value="0"/>	<input type="text" value="3"/>	1 = 000	2 = 00	3 = 0	4 = I	5 = II
		6 = III	7 = IV	8 = V	9 = VI	10 = VII
		11 = VIII	12 = IX	13 = X	14 = XI	15 = XII

Maturity Subgroup:

Please enter a value from 0 - 9

B. DISEASE REACTIONS

0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Tolerant

Bacterial

Bacterial Pustule (*Xanthomonas campestris* pv. *glycines* (Nakano) Dye)

Bacterial Blight (*Pseudomonas syringae* pv. *glycinea* (Coerper) Young, Dye, & Wilkie)

Wildfire Blight (*Pseudomonas syringae* pv. *tabaci* (Wolf & Foster) Young, Dye, & Wilkie)

Fungal

200300165

Brown Spot (*Septoria glycines* Hemmi)

Frogeye Leaf Spot (*Cercospora sojina* Hara)

<input type="text" value="0"/> race 1	<input type="text" value="0"/> race 2	<input type="text" value="0"/> race 3	<input type="text" value="0"/> race 4
<input type="text" value="0"/> race 5	<input type="text" value="0"/> race 6	<input type="text" value="0"/> Other (Please Specify)	

Target Spot (*Corynespora cassiicola* (Berk. & Curt.) Wei)

Downey Mildew (*Peronospora trifoliorum* var. *manchurica* (Naum.) Syd. ex Gäum)

Powdery Mildew (*Microsphaera diffusa* Cke. & Pk.)

Brown Stem Rot (*Phialophora gregata* (Allington & Chamberlain) W. Gams.)

Stem Canker (*Diaporthe phaseolorum* (Cke. & Ell.) Sacc. var. *caulivora* Athow & Caldwell)

Pod and Stem Blight (*Diaporthe phaseolorum* (Cke. & Ell.) Sacc. var. *sojae* (Lehman) Wehm.)

Purple Seed Stain (*Cercospora kikuchii* (T. Matsu. & Tomoyasu) Gardener)

Rhizoctonia Root Rot (*Rhizoctonia solani* Kühn)

Phytophthora Root Rot (*Phytophthora megasperma* Drechs. f. sp. *glycinea* (Kuan & Erwin))

<input type="text" value="2"/> race 1	<input type="text" value="1"/> race 8	<input type="text" value="2"/> race 15	<input type="text" value="1"/> race 22
<input type="text" value="2"/> race 2	<input type="text" value="1"/> race 9	<input type="text" value="2"/> race 16	<input type="text" value="1"/> race 23
<input type="text" value="1"/> race 3	<input type="text" value="2"/> race 10	<input type="text" value="2"/> race 17	<input type="text" value="2"/> race 24
<input type="text" value="1"/> race 4	<input type="text" value="2"/> race 11	<input type="text" value="2"/> race 18	<input type="text" value="1"/> race 25
<input type="text" value="1"/> race 5	<input type="text" value="1"/> race 12	<input type="text" value="1"/> race 19	<input type="text" value="0"/> race 26
<input type="text" value="1"/> race 6	<input type="text" value="2"/> race 13	<input type="text" value="1"/> race 20	<input type="text" value=""/> Other (Please Specify)
<input type="text" value="1"/> race 7	<input type="text" value="1"/> race 14	<input type="text" value="1"/> race 21	

Bud Blight (Tobacco Ringspot Virus)

Yellow Mosaic (Bean Yellow Mosaic Virus)

200300165

Cowpea Mosaic (Cowpea Chlorotic Virus)

Pod Mottle (Bean Pod Mottle Virus)

Seed Mottle (Soybean Mosaic Virus)

Nematode

Soybean Cyst Nematode (*Heterodera glycines* Ichinohe)

<input type="text" value="0"/> race 1	<input type="text" value="0"/> race 4	<input type="text" value="0"/> race 9
<input type="text" value="0"/> race 2	<input type="text" value="0"/> race 5	<input type="text" value="0"/> race 14
<input type="text" value="0"/> race 3	<input type="text" value="0"/> race 6	<input type="text" value="0"/> Other (<i>Please Specify</i>)

Lance Nematode (*Hoplolaimus columbus* Sher)

Southern Root Knot Nematode (*Meloidogyne incognita* (Kofoid & White) Chitwood)

Northern Root Knot Nematode (*Meloidogyne hapla* Chitwood)

Peanut Root Knot Nematode (*Meloidogyne arenaria* (Neal) Chitwood)

Reniform Nematode (*Rotylenchus reniformus* Linwood & Olivera)

Javanese Nematode (*Meloidogyne javanica* (Treub) Chitwood)

Other Nematode (*Please Specify*)

C. PHYSIOLOGICAL RESPONSES 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Tolerant

Iron Chlorosis on Calcareous Soil

Phosphorus Other (*Please Specify*) _____

Boron

Aluminum

Salt

Drought

00

D. INSECT REACTIONS

0 = Not Tested

1 = Susceptible

2 = Resistant

3 = Tolerant

 Mexican Bean Beetle (*Epilachna varivestis* Mulsant)

 Potato Leaf Hopper (*Empoasca fabae* (Harris))

 Other (Please Specify)
E. HERBICIDE REACTIONS

0 = Not Tested

1 = Susceptible

2 = Resistant

 Metribuzin

 Bentazone

 Sulfonylurea

 Glyphosate

 Glufosinate

 Pendimethalin

 Other (Please Specify)
F. TRANSGENIC COMPOSITION

Has the development of the subject variety included the insertion of genetic material from an organism other than a soybean, or, the removal of genetic material from the application variety?

If yes, please complete the following information requests*. Use additional pages if necessary.

☒ YES ☐ NO

1. Please state the vector's name:

2. Please state the vector components:

3. Please describe the genetic material successfully transferred into the subject variety:

4. Please describe the insertion protocol:

* A literature citation(s) explaining the four information requests above may be an acceptable alternative to completion of the "Transgenic Composition" portion of this form.

Permission given per
telephone conversation
3/10/2003

G. BIOCHEMICAL MARKERS

Please describe any biochemical information here, which you believe will be helpful in further describing the subject variety (e.g. Simple Sequence Repeats, Restriction Fragment Length Polymorphisms, Isozymic Characterization). Use additional pages if necessary.

H. COMMENTS

200300165

The development of soybean line 40-3-2 by Monsanto involved transgenic procedures that involved the insertion of genetic materials from an organism other than the soybean. Glyphosate tolerance in the subject variety was, however, derived by traditional breeding from soybean. Procedures by which Monsanto used for transgenic insertions, including vector and vector components can be found in "Crop Sci. 35:1451-1461 - Identification and characterization of a Glyphosate-tolerant soybean line".

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S) South Dakota Agricultural Experiment Station	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER Hendricks RR	3. VARIETY NAME SD1081RR
4. ADDRESS (Street and No., or R.F.D. No., City, State, and Zip, and Country) South Dakota State University Agricultural Hall 129 Brookings, SD 57007 USA	5. TELEPHONE (include area code) (605)-688-4149	6. FAX (include area code) (605)688-6065
7. PVPO NUMBER 200300165		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain ☒ YES ☐9. Is the applicant (individual or company) a U.S. National or a U.S. based company? If no, give name of country ☒ YES ☐ NO10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (If needed, use the reverse for extra space):

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 6 minutes per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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